



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBEL135M-2905-101-07
Job Sheet 189447



Replaces 187589

Part No: RBEL135M-2905-101-07

Job Qty: 4 pcs

Part Name: Geared Pulley



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/24/19

Job Tracking No: replaces 187589

Due Date: 1/25/19

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG RBEL135M-2905-101-05 REV 9 IPP REV A 18.05.24 NEW ISSUE FK VERIFY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	4 pcs	1/25/19	1/25/19	0.00	0.00	Purchasing - 1		<i>[Signature]</i> JAN 24 2019
							Purchasing - 2		
							Purchasing - 3		
110	Packaging 2-1 - Receive - B4B	4 pcs	1/25/19	1/25/19	0.00	0.00	Packaging 2 - 1 - B4B		<i>[Signature]</i> JAN 24 2019
							Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		
							Packaging 2 - 18 - B4B		
							Packaging 2 - 19 - B4B		
							Packaging 2 - 20 - B4B		
							Packaging 2 - 21 - B4B		
							Packaging 2 - 22 - B4B		
							Packaging 2 - 23 - B4B		
							Packaging 2 - 24 - B4B		
							Packaging 2 - 25 - B4B		
							Packaging 2 - 26 - B4B		
							Packaging 2 - 27 - B4B		
							Packaging 2 - 28 - B4B		



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S147705



Part: RBEL135M-2905-101-07

Job No: 189447

Serial No/Batch: S147705

Revision: 9

Inspector:

Exp Date:

Instructions:

Date: 01/24/19

				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	DAS
120	QC 6	4 pcs	1/25/19	0.00 0.00	QC 6 - 38
					QC 6 - 42
					QC 6 - 9
					QC 6 - 68
130	Packaging 3-1 - Stock - B4B	4 pcs	1/25/19	0.00 0.00	Packaging 3 - 1 - B4B
					Packaging 3 - 2 - B4B
					Packaging 3 - 3 - B4B
					Packaging 3 - 4 - B4B
					Packaging 3 - 5 - B4B
					Packaging 3 - 6 - B4B
					Packaging 3 - 7 - B4B
					Packaging 3 - 8 - B4B
					Packaging 3 - 9 - B4B
					Packaging 3 - 10 - B4B
					Packaging 3 - 11 - B4B
					Packaging 3 - 12 - B4B
					Packaging 3 - 13 - B4B
					Packaging 3 - 14 - B4B
					Packaging 3 - 15 - B4B
					Packaging 3 - 16 - B4B
					Packaging 3 - 17 - B4B
					Packaging 3 - 18 - B4B
					Packaging 3 - 19 - B4B
					Packaging 3 - 20 - B4B
					Packaging 3 - 21 - B4B
					Packaging 3 - 22 - B4B
					Packaging 3 - 23 - B4B
					Packaging 3 - 24 - B4B
					Packaging 3 - 25 - B4B
					Packaging 3 - 26 - B4B
					Packaging 3 - 27 - B4B
					Packaging 3 - 28 - B4B
					Packaging 3 - 29 - B4B
					Packaging 3 - 30 - B4B
					Packaging 3 - 31 - B4B
					Packaging 3 - 32 - B4B
					Packaging 3 - 33 - B4B
					Packaging 3 - 34 - B4B
					Packaging 3 - 35 - B4B
					Packaging 3 - 36 - B4B
140	QC 21 - SA	4 pcs	1/25/19	0.00 0.00	QC 21 - SA - 21
Part Op 100 - -Issue P/O to PJ MACHINAGE; P/O _____ -Manufacture RBEL135M-2905-101-07 as per DWG. - Descriptions: Certificate of Conformity is required 110 - Certificate of Conformity is required					
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
RBEL135M-2905-101-07P	Geared Pulley	4 Ea (1 ea)	100-Purchasing	5147625	

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBEL135M-2905-101-07P	4	4	0
Part Specifications				
Specifications could not be found.				

Plex 1/24/19 11:15 AM dart.lacelle.linda



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBEL135M-2905-101-07

Job Sheet 187589



Part No: RBEL135M-2905-101-07

Job Qty: 4 pcs

Part Name: Geared Pulley



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 12/10/18

Job Tracking No:

Due Date: 12/27/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBEL135M-2905-101-05 REV 9 IPP REV A 18.05.24 NEW ISSUE FK VERIFY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup	Run		
					Hrs	Hrs	Workcenter / Supplier Lead Time	
100	Purchasing	4 pcs	12/27/18	12/27/18	0.00	0.00	Purchasing - 1	
							Purchasing - 2	
							Purchasing - 3	
110	Packaging 2-1 - Receive - B4B	4 pcs	12/27/18	12/27/18	0.00	0.00	Packaging 2 - 1 - B4B	
							Packaging 2 - 2 - B4B	
							Packaging 2 - 3 - B4B	
120	QC 6	4 pcs	12/27/18	12/27/18	0.00	0.00	QC 6 - 16	
							QC 6 - 38	
							QC 6 - 42	
							QC 6 - 9	
							QC 6 - 68	
130	Packaging 3-1 - Stock - B4B	4 pcs	12/27/18	12/27/18	0.00	0.00	Packaging 3 - 1 - B4B	
							Packaging 3 - 2 - B4B	
							Packaging 3 - 3 - B4B	
							Packaging 3 - 4 - B4B	
							Packaging 3 - 5 - B4B	
140	QC 21 - SA	4 pcs	12/27/18	12/27/18	0.00	0.00	QC 21 - SA - 16	

Part Op 100 - Issue P/O to PJ MACHINAGE; P/O 042052 - Manufacture RBEL135M-2905-101-07 as per DWG.

Descriptions: -Certificate of Conformity is required

110 - Certificate of Conformity is required

x4 A R

Dec 17, 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBEL135M-2905-101-07P	Geared Pulley	4 (1 ea)	100-Purchasing	5147625

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBEL135M-2905-101-07P	4	0	0

Part Specifications

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042)	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor		
			QC / QA Coordinator		
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

Specifications could not be found.

Plex 12/10/18 10:51 AM Dart.lajeunesse.marie

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

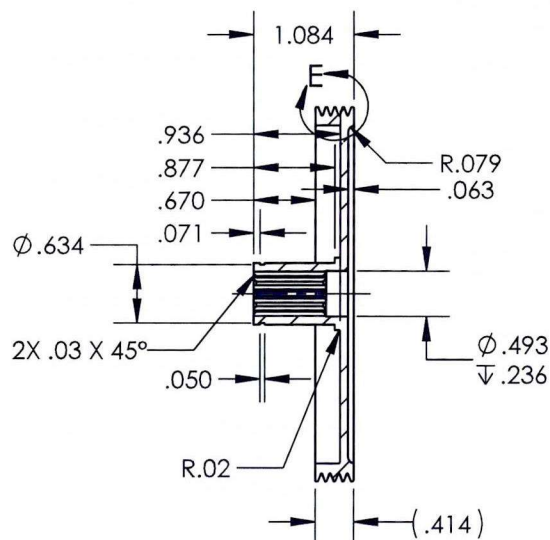
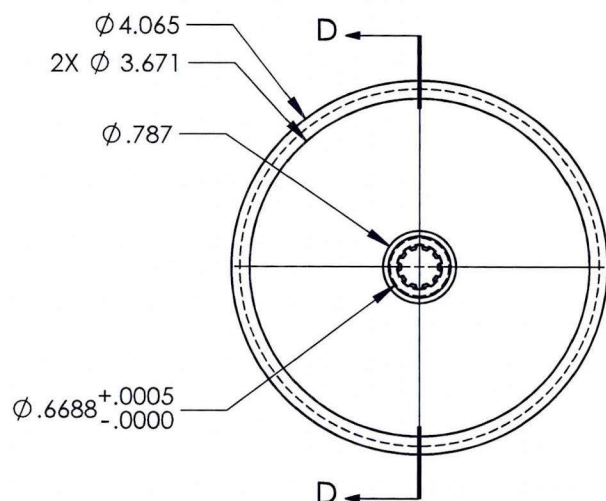
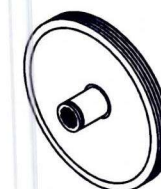
NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

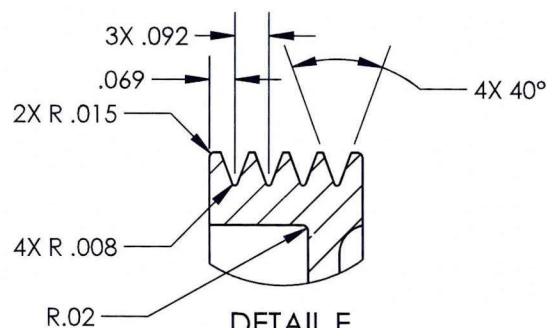
This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		CHANGED MOTORS FROM FLEX #L3309FR TO MILWAUKEE #6116-33, ALSO CHANGED PULLEY SIZE TO ADJUST FOR THE 1,000 RPM DIFFERENCE. DRIVEN 07 WAS $\phi 4.173$ NOW $\phi 4.065$. ALSO -07 $\phi 3.671$ (x2) IS NOW $\phi 3.779$ (x2).	5/12/2010	WP	DW
4		CH'D -07 $\phi 17$ mm TO $\phi .6688 +.0005 -.0000$, ADDED -07 (.414) DIM. ALL CHANGES PER G.E.	12/29/2010	RJC	RW
5		ADDED -07 NICKLE PLATE THICKNESS .0004 - .0006.	12/20/2012	RJC	SE
9	16-0222	-07 CH'D MATERIAL WAS 1018 IS 1018/1020 CR, CH'D FINISH WAS NICKEL PLATE IS ZINC PLATE ASTM B633 TYPE 1 SC2.	11/23/2016	RJC	SM



SECTION D-D

SPUR GEAR DATA	
NO. OF TEETH	10
MOD	1.0
THREE TEETH	.303
PITCH DIA.	$\phi .428$
DIAMETRAL PITCH	7
PRESSURE ANGLE	30°
MAJOR DIAMETER	.480
MINOR DIAMETER	.395
CASTING OF	INTERNAL GEAR
GEAR STANDRAD	5480



DETAIL E
SCALE 2 : 1

(-07) X 4
GEARED PULLEY

DART AEROSPACE	
TITLE HYDRAULIC PUMP DRIVE TOOL	
DWG NO. RBEL135M-2905-101-07	REV 9
MAT'L 1018/1020 CR HEAT TREAT FINISH ZINC PLATE SPEC ASTM B633 TYPE I SC 2	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125/	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: PERRITT	USED ON MODEL
CHECKED: DUERFELDT	EUROCOPTER EC135
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: MACKOVJAK	
SCALE 1:2	DATE 4/23/2010
SHEET 6 OF 18	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

PURCHASE ORDER

PO042052

Tel (613) 632-5200

Supplier: PJM001-VC
P.J. Machinage
1381 Rte Cite-Des-Jeunes
St-Lazare
QC
J7T 2B8
Phone: 450-455-0705

PO No: PO042052
PO Date: 12/17/18
Due Date: 1/25/19
Purchase Order Revision:
Revision Date:
Ship-To Contact: Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
①	187589	RBEL135M-2905-101-07P			Geared Pulley REV 9	Firmed	-	1/25/19	4 Ea	0 Ea	4 Ea	\$575.00/Ea	\$2,300.00
								4 X JAN 24 2019					

Grand Total: \$2,300.00

Order Notes

Procurement Quality Clauses
A005 RIGHT OF ENTRY
A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE)
A012 CHEMICAL AND PHYSICAL TEST REPORTS
A016 PERSONNEL QUALIFICATION
A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
A026 CERTIFICATION OF MATERIAL CONFORMANCE
A041 QUALITY MANAGEMENT SYSTEM
A042 DART NOTIFICATION BY SUPPLIER
A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 12/17/18 10:39 AM dart.Lussier.Patrick

Shipping Order

17/12/2018

P.J. Machinage (9052 9470 Qc Inc).
1381, Rte Cité-Des-Jeunes,
St-Lazare, Qc
J7T 2B8

Tel.: 450 455-0705

Order : 7372
Reference : PO042052-B/L : 7372
Bid : 15523

Customer: 628

Ship To

Dart Aerospace Ltd.
Accounts payable
1270 Aberdeen St
Hawkesbury, Ontario
K6A 1K7

Same

Fax: 1 613 632-5246

Item No.	Description	Qty	Qty. Delivere	B/O Qty
001	RBEL135M-2905-101-07 Rev. 9 Hydraulic Pump Drive Tool (Geared Pulley)	4	<u>4</u> ✓	<u>φ</u>

DAS
38
9-89

P.J. Machinage demeure propriétaire des pièces machinées et autres biens vendus ou fruit des commandes exécutées pour le client jusqu'à complet paiement par le client de la facture afférente, peu importe que la matière première ou pièce ait été fournie par le client ou par P.J. Machinage. Dans les cas où la matière première (ou pièce) appartenait au client avant qu'elle ne soit remise à P.J. Machinage, aux fins de l'exécution d'une commande, entraîne la cession des droits de propriété du client sur ladite pièce ou matière première

Shipping : Your truck
Package No : 23/01/2019
Merchandise Received: 23/01/2019

Ref. : _____

PJ Machinage

Certificate of conformance

Sold to:

Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON, K6A 1K7

Supplier address:

PJ Machinage
1381 Route Cité-Des-Jeunes
St-Lazare, Qc, J7T 2B8

Purchase Order: PO042052 ✓

This is to certify that the below names items were inspected and/or tested to your drawings, specifications and purchase order. Objective evidence are shipped with the products and are on file to support the verifications and/or tests and can be made available on request, unless otherwise noted.

<u>Part Number</u>	<u>Quantity</u>	<u>Description</u>
RBEL 135M-2905-101 ✓ 07 Rev. 9	4 ✓	Hydraulic Pump Drive Tool (Geared Pulley)

DAS
38
9-89

 , January 23 , 2019

CERTIFICATE OF TEST CE TIFICAT 'E SAIS



Earle M. Jorgensen
(Canada) Inc.

Page 01 of 01

Certification Date
9-AUG-2018

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

135110
PART NUMBER/NUMÉRO DE PIÈCE
503410

EARLE M JORGENSEN CAN DIV RMCL
1255, AVE LAPLACE
VILLE DE LAVAL QC H7C 2N6

Invoice Number
S710096

SOLD TO: P.J. MACHINAGE
VENDU À: 9052-9470 QUEBEC INC
1381 ROUTE DE LA CITE DES JEUNES
SAINT- LAZARE QC J7T 2B8

SHIP TO:
EXPÉDIÉ À:

P.J. MACHINAGE
9052-9470 QUEBEC INC.
1381 ROUTE CITE DES JEUNES
SAINT- LAZARE QC J7T 2

Description: 1018 HR BAR ASTM A576
4-1/2 RD X 20' R/L
HEAT: 50675152/05 ITEM: 503410

Line Total: 1083 LB

Specifications:
ASTM A576 90B ASTM A29 16

CHEMICAL ANALYSIS

C	MN	P	S	SI	CU	NI	CR
0.17	0.73	0.012	0.016	0.35	0.25	0.10	0.10
MO	SN	V	NB	TI	B	N	
0.021	0.011	0.058	0.002	0.001	0.0011	0.00	

RCPT: R461017

COUNTRY OF ORIGIN : USA

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR PSI	ULT TEN PSI	%ELONG IN 02 IN	%RED IN AREA	HARDNESS
	47500.0	76300.0	23.3		

MATERIAL IS FREE FROM MERCURY CONTAMINATION
NO WELD REPAIR PERFORMED ON MATERIAL

COMMENTS

melted and mfg in canada

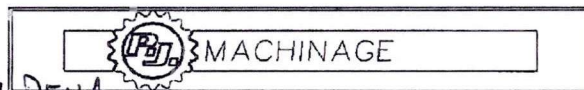
The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut. The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES

MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

QUANTITÉ: 4



DATE: _____

FORMAT No.: 001

PAGE No.: _____

CONTRÔLE DE QUALITÉ

NOM DE LA PIÈCE: Hydraulic Pump Drive Tool

MATÉRIEL: HRS 1012

[illegible]

OBSERVATION:

SIGNATURE RESPONSABLE:

Benoit Mayer 



Certificat de Conformité / Certificate of Compliance

(016137-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
Tel: 514-335-3666 Fax: 514-335-3868
www.groupaltech.com

Bon de Livraison / Packing Slip

016137 - 1

Livré à / Ship to

PJ MACHINAGE

1381 Rte de la Cité-des-Jeunes
St-Lazare, QC, J7T2B8
CANADA

Tel.: 450-455-0705 Fax.: 450-455-1167

Client / Customer:

PJ MACHINAGE

1381 Rte de la Cité-des-Jeunes
St-Lazare, QC, J7T2B8
CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By		Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.			
22-Jan-2019		Aman				135868			
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)		CATG. U/M	Comm. /Ordered	Exp/ Shipped	Quantités / Quantities Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	RBEL135M-2905-101-07 Rev.	RBEL135M-2905-101-07 01-ZINC-CLEAR TRI [ZINC CLEAR TRIVALENT] ASTM B633, TYPE 1, SC2: ZINC, 0.0003" ***		ZINC CH	8	8	0	0	0

Notes Additionnelles / Additional Notes

Épaisseur réelle
Actual ThicknessInspecteur Qualité
Quality InspectorRéçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
Our financial and legal responsibility will not be higher than the amount of invoice.